



Distracted Driving




Paul Romer
Senior Director
Defensive Driving
National Safety Council
Paul.Romer@nsc.org

March 2011



Distracted Driving





James A. Solomon
Director
Program Development
And Training
Defensive Driving
Courses
National Safety
Council
James.Solomon@nsc.org

March 2011





This slide is titled "Injury Data Highlights" in a large, bold, black font. To the left of the title is the National Safety Council logo, which consists of a green cross inside a white circle with the words "NATIONAL SAFETY COUNCIL" around it. Below the logo is a vertical strip showing a multi-lane highway interchange. The background of the slide is a solid dark green. On the left side of the slide, the text "Injury Facts® 2011 Edition" is displayed in a blue font. Below this text, it says "Most current data available" and "– 2009, 2008, or 2007 – depending on the source". On the right side of the slide is a graphic of the cover of the "INJURY FACTS® 2011 EDITION" report. The cover features the National Safety Council logo, a vertical strip of icons representing different types of accidents (e.g., car crash, pedestrian, bicycle), and a line drawing of a car with two people standing next to it.



Unintentional Injuries

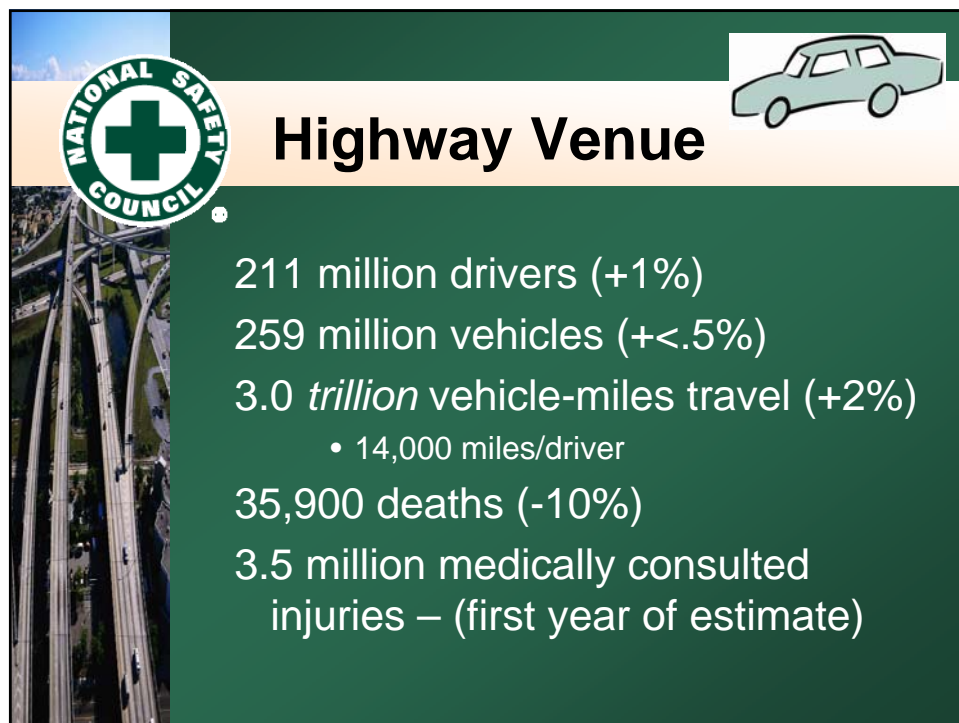
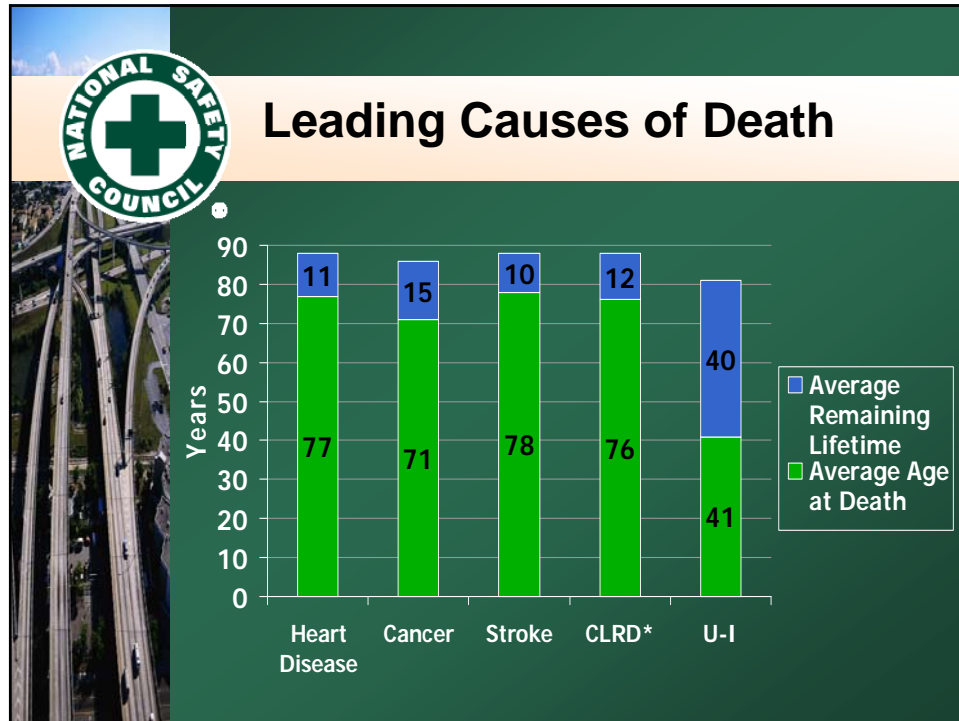
1 cause of death for people 1 to 42 years old

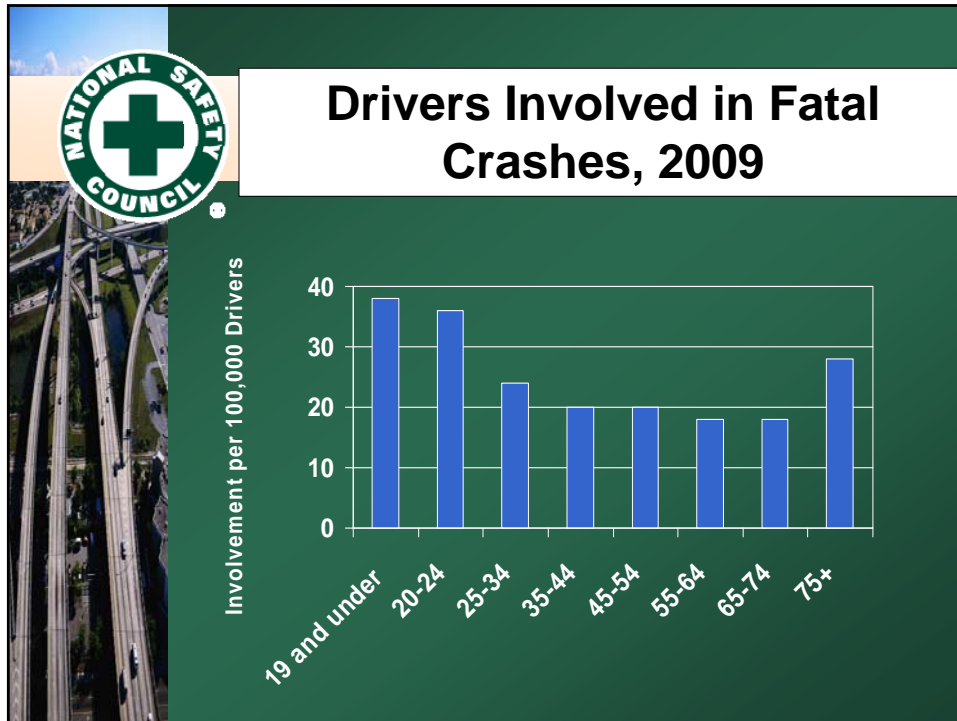
5 cause of death for all ages



Leading Causes of Death

Heart disease	616,067
Cancer	562,875
Stroke	135,952
Chronic lower respiratory disease	127,924
Unintentional injuries	123,706
Alzheimer's disease	74,632

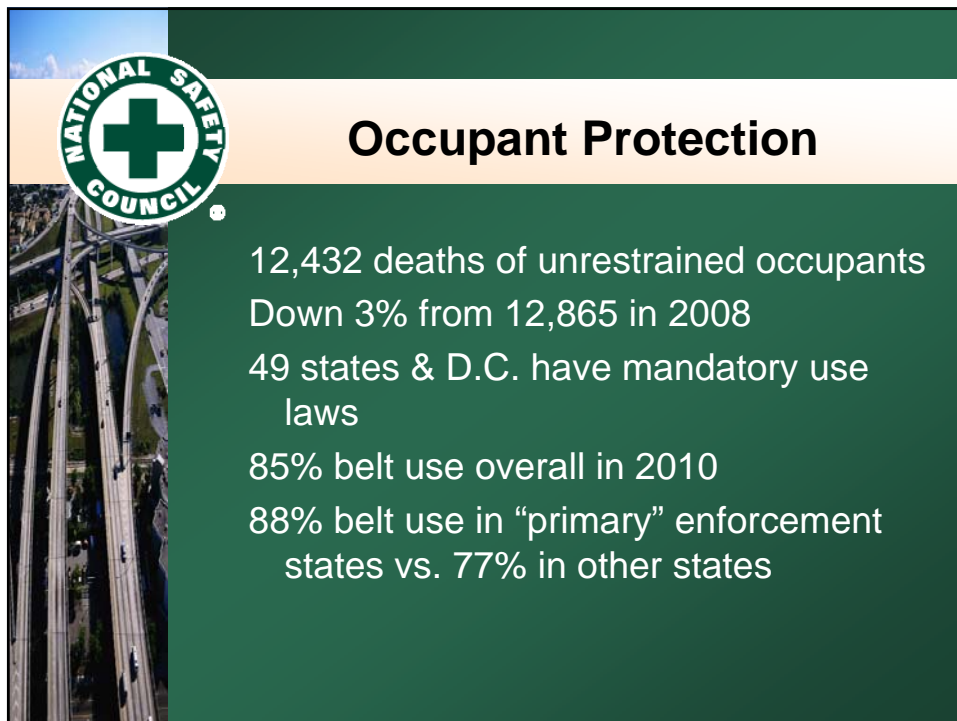
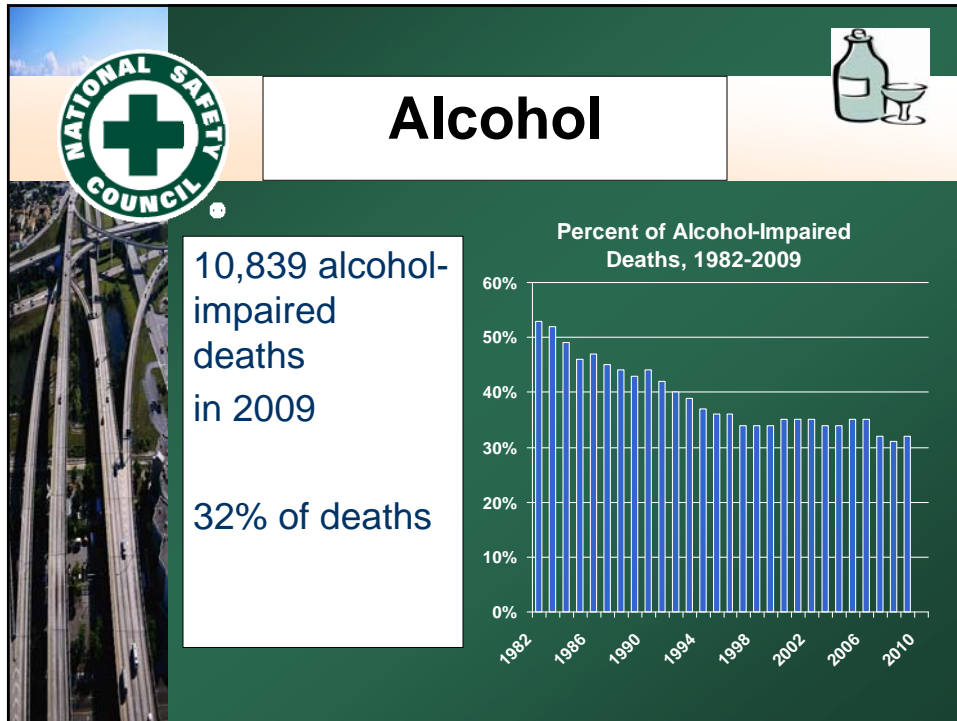





Highway Safety Issues

Alcohol

- 21 year drinking age in all states and D.C.
- 0.08 BAC threshold in all states and D.C.
- Zero tolerance for minors in all states and D.C.



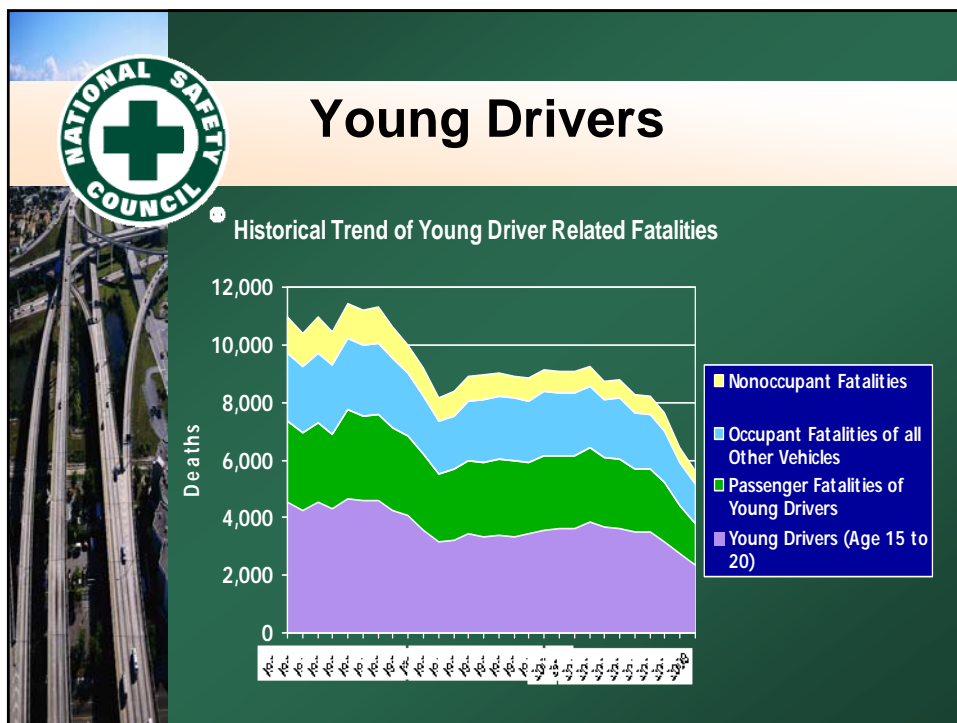




Young Drivers

Total fatalities in crashes involving 15-20 year old drivers exceeded 5,623 in 2009.

The latest 2007 mortality figures show that motor-vehicle crashes are the leading cause of death for 15-20 year olds.

Young driver fatalities account for only about half of the overall fatalities associated with young drivers.








Distracted Driving

In 2009, 5,474 people lost their lives and an estimated 448,000 people were injured in police reported crashes that involved distraction (NHTSA).

9% of drivers were using cell phones in 2009.

- Use was highest among young drivers 16 – 24 years old and higher among females than males.




The Ticking Time Bomb



Scope of the Problem

Nature and Magnitude of the Risk

Comparing the Risk

Implications to Employers







Scope of the Issue

Inattention involved in 78% of all observed crashes and 66% of all crash events (crash / near crash). (*Virginia Tech*)

9% of drivers are using hand-held cell phones at any one time. (*NHTSA*)



236 million cell phone subscribers in the U.S. (*CTIA, May 2007*)



Scope of the Issue

73% talked on cell phones while driving and 19% admitted text messaging while driving. (*Nationwide Insurance*)



2/3 of teens admit to text messaging while driving; 16% of all cell phone users. (*Zogby*)



Measuring the Risk

Relative risk of cell phone use is similar to the hazard associated with driving with a BAC of .08. (*Redelmeier & Tibshirani*)

Slower reaction times caused by cell phone use are comparable to that of a .08 BAC. (*Strayer*)




Measuring the Risk

In an observational study, 75% of cell phone users committed a traffic violation. (*Strayer*)

Cell phone users are 4 times as likely to be involved in injury crashes. (*Insurance Institute for Highway Safety*)

Simulator study showed cell phone users were 5 times more likely to be in a crash. (*Strayer*)





Effects on Driving

It is well established that cell phone usage significantly impairs driving performance.

“Inattention blindness” – looking but not seeing. (*James, Neisser, Simmons*)

Drivers talking on a cell phone look but fail to see up to half of the information in the driving environment.





Effects on Driving

“Dual-task Interference” – Active engagement in conversation raises the impairment.

Attention is withdrawn from the processing of the information in the driving environment necessary for safe operation of the vehicle.


Impairments occur from both hand-held and hands-free units.



Cell Phones vs. Other Distractions

Cell phone use is more distracting than radio broadcasts, books on tape, recorded conversations and passengers. (Strayer)


Cell phone use is less distracting than certain other activities (applying makeup, reaching for a moving object, reading) but their lower frequency lowers the involvement in crashes below that of cell phones. (Virginia Tech)



Cell Phones vs. Passenger Conversations

Passengers provide collaborative problem-solving, shared situation awareness and active support of the driver by the passenger. (Strayer)



A front seat passenger reduces the risk of a crash to 38% of that of a cell phone conversation. (Virginia Tech)



Hand-Held vs. Hands-Free

No difference in the interference from a hands-free or hand-held conversation. (Strayer)



- Dialing increases missed signals, reduces reaction time, and increases mental workload.
- Conversing is less distracting, but endures much longer, which leads to higher crash involvement.



Other Factors

Significant factors in the magnitude of the distraction:

- Content of the conversation
- Age of the driver
- Conditions outside the vehicle



Other Factors

Multiple tasks or distractions are the most demanding.

- Interaction with music or navigation systems
- High speed
- Following another vehicle





Text-Messaging: $\text{drv} + \text{txt} = :($

9 out of 10 people believe that text messaging while driving is dangerous and distracting. (Harris Interactive & Pinger)

91% of American adults believe that those who text message while driving are as dangerous as those who have had a couple alcoholic drinks. (Harris Interactive & Pinger)



Almost 80% of crashes and 65% of near misses occur within three seconds of some form of driver distraction. (NHTSA)



Implications for Employers

Injuries to employees; lost time on the job

- Motor vehicle crashes are the #1 cause of work-related fatalities (2,800 in 2006)
- Average cost per crash is \$16,500
- Average cost per crash injury: \$74,000



Implications for Employers

Employers are being sued for liability associated with crashes involving employees conducting company business on cell phones.

- One recent case settled out of court for \$5,000,000.





Strategies for Employers

- Ensure Leadership reflects values & goals of the organization
- Establish Motor Vehicle Policies that set expectations
- Provide motor vehicle safety Training & Education that improves skills
- Monitor, evaluate, and counsel employee Performance to improve behavior



Strategies for Employers

- Provide your employees with the knowledge and tools to use both ON and OFF the job.



What's the Actual Costs

NSC estimates that the costs of all crashes attributable to cellular phone usage is

\$13 Billion

